

CLAIMS

Claims 1 – 15 (Cancelled)

16. (Original) A wireless transmitter, comprising:

an encoder for encoding a set of information bits to provide a set of code symbols at a data rate;

a demultiplexer for providing said set of code symbols in first and second code symbol subsets having different code symbol rates to first and second modulators, wherein said data rate is equal to a combined said different code symbol rates, said first and second modulators respectively modulating said first and second code symbol subsets according to first and second code symbol rate formats, respectively, wherein said different code symbol rates have a ratio equal a number other than one, to provide modulated first code symbol subset and second code symbol subset.

17. (Cancelled)

18. (Original) The wireless transmitter of claim 16 wherein said first and second modulators repeat code symbols within said first and second code symbol subsets, respectively, according to a said respective code symbol rate.

19. (Original) The wireless transmitter of claim 18 wherein said transmission subsystem scales a respective energy of said first and second modulated code symbol subsets according to a respective amount of code symbol repetition.

20. (Original) The wireless transmitter of claim 16 wherein said first modulator includes a first interleaver having a first interleaver format dependent on a first code symbol rate, and said second modulator includes a second interleaver having a second interleaver format dependent on a second code symbol rate.

21. (Original) The wireless transmitter of claim 16 wherein said first modulator includes a first PN scrambler for scrambling said first code symbol subset according to a first code symbol rate, and said second modulator includes a second PN scrambler for scrambling said second code symbol subset according to a second code symbol rate.

22. (Cancelled)

23. (New) A wireless transmitter, comprising:
means for encoding a set of information bits to provide a set of code symbols at a data rate; and

means for providing said set of code symbols in first and second code symbol subsets having different code symbol rates to first and second modulators, wherein said data rate is equal to a combined said different code symbol rates, said first and second modulators respectively modulating said first and second code symbol subsets according to first and second code symbol rate formats, respectively, wherein said different code symbol rates have a ratio equal a number other than one, to provide modulated first code symbol subset and second code symbol subset.

24. (New) The wireless transmitter of claim 23 wherein said first and second modulators repeat code symbols within said first and second code symbol subsets, respectively, according to a said respective code symbol rate.

25. (New) The wireless transmitter of claim 23 wherein said transmission subsystem scales a respective energy of said first and second modulated code symbol subsets according to a respective amount of code symbol repetition.

26. (New) The wireless transmitter of claim 23 wherein said first modulator includes a first interleaver having a first interleaver format dependent on a first code symbol rate, and said second modulator includes a second interleaver having a second interleaver format dependent on a second code symbol rate.

27. (New) The wireless transmitter of claim 23 wherein said first modulator includes a first PN scrambler for scrambling said first code symbol subset according to a first code symbol rate, and said second modulator includes a second PN scrambler for scrambling said second code symbol subset according to a second code symbol rate.

28. (New) A method operational on a wireless transmitter, comprising:
encoding a set of information bits to provide a set of code symbols at a data rate; and
providing said set of code symbols in first and second code symbol subsets having different code symbol rates to first and second modulators, wherein said data rate is equal to a combined said different code symbol rates, said first and second modulators respectively modulating said first and second code symbol subsets according to first and second code symbol rate formats, respectively, wherein said different code symbol rates have a ratio equal a number other than one, to provide modulated first code symbol subset and second code symbol subset.

29. (New) The method claim 28 wherein said first and second modulators repeat code symbols within said first and second code symbol subsets, respectively, according to a said respective code symbol rate.

30. (New) The method claim 28 wherein said transmission subsystem scales a respective energy of said first and second modulated code symbol subsets according to a respective amount of code symbol repetition.

31. (New) The method claim 28 wherein said first modulator includes a first interleaver having a first interleaver format dependent on a first code symbol rate, and said second modulator includes a second interleaver having a second interleaver format dependent on a second code symbol rate.

32. (New) The method claim 28 wherein said first modulator includes a first PN scrambler for scrambling said first code symbol subset according to a first code symbol rate, and

said second modulator includes a second PN scrambler for scrambling said second code symbol subset according to a second code symbol rate.